

# OCTOBER MINUTES

## REGIONAL HAZARD MITIGATION STEERING COMMITTEE MEETING

**Tuesday, October 15, 2013      12:00 PM – 3:00 PM**

**Location:** KCOEM, Breakout Room, 116

### **Attendance:**

Kimberly Behymer (Kent), Mike Ryan (Zone 1), James Tritten (Valley Medical), Monica Walker (KCDNR), Bob Taylor (Covington Water District), Bob Freitag (University of Washington), Janice Rahman (KCOEM), Nora Jagielo (KCOEM), Kristen Gelino (Tetra Tech), Rob Flaner (Tetra Tech)

### **Key Updates:**

- The City of Snoqualmie will be part of the Regional Hazard Mitigation Plan.
- There will be no Steering Committee meetings in November or December.

### **Welcome and Introductions:**

- New King County OEM staff member, Nora Jagielo, has taken over Sam Ripley's roles and responsibilities.
- Sam Ripley is working on the King County Annex.

### **Risk Assessment Update:**

- There are two types of risk analyses: general building stock and critical facilities.
- With critical facilities, we look at indirect damage such as functional downtime.
- Results from critical facilities data will be summarized by category with their average functional downtime.
- After the analysis is complete, KCOEM will get the model and will be able to make updates to critical facilities as needed.
- FEMA has default data preloaded into HAZUS.
- The model has extent and location data and the ability to zoom in by jurisdiction.
- The King County Flood Control District has very detailed flood information for King County. Their data was incorporated into the model.
- We know what essential facilities are in the flood plain based on the King County Flood Control District's data.
- However, the definition of critical facilities the Steering Committee agreed upon is much broader.
- There is limited tsunami data in King County. Tetra Tech will note this as a deficiency in the plan.
- Tetra Tech is using the "best available data" for the risk assessments.

### **Jurisdictional Annex/Progress Report Events:**

- Tetra Tech used a phased approach for the jurisdictional annexes to engage all partners.
- There are two annex templates, one for jurisdictions and one for special purpose districts.
- Phase I of the deployment was the jurisdictional annex profile and the progress report.
- For 24 of our planning partners this plan will represent an update.
- Tetra Tech will test the progress report template that will be included in the plan maintenance strategy on the jurisdictions that were covered under a previous mitigation plan.

- Phase II of the deployment was the capability assessment and the critical facilities verification. Directions for Phase II were sent out in October with a template and detailed instructions. Phase II is due on November 1, 2013.
- All of this work leads up to the Jurisdictional Annex workshops in November. The workshops will focus on risk ranking, action plan development, and action analysis.
- There are a total of 183 responses to the public survey. The survey will stay live until the plan review phase.
- Steering committee members do not need to attend the workshops unless they are the designated point of contact for their jurisdiction.
- Tetra Tech will send out guidance to planning partners on who to bring to the workshop.

#### **Phase 1, Public Outreach Review:**

- There was good media coverage of the events. Attendees mentioned they heard about the event on their local TV or radio station.
- There was good attendance.
- There were HAZUS workstations at the public meetings. Overall, the HAZUS workstations were well received.
- A great success story came out of the Kent workshop. The instructor of a middle school robotics team heard about the event on the radio and brought his students. The team is participating in a competition designing a hazard mitigation strategy using a robot. The students asked thought provoking questions and participated at the HAZUS workstations.
- A few more surveys were completed at the public meetings.
- There will be another set of public meetings when the plan is in the review phase.

#### **Plan Maintenance Strategy:**

- Tetra Tech proposed a plan maintenance strategy.
- The Steering Committee will have a chance to comment on the plan maintenance strategy during the plan review process.

#### **Strengths, Weaknesses, Obstacles, and Opportunities (SWOO):**

- There will be an excess of 500 alternatives with all the planning partners. There needs to be a clear explanation of why each alternative is the best option.
- Tetra Tech is compiling a "Mitigation Catalog" to represent the comprehensive range of alternatives.
- The alternatives need to take into account the hazard, the exposure, the vulnerability, and the capability.
- The alternatives are scaled by type: individual, business, government.
- Action plan development is meant to spur thought.

Hazard	Strengths	Weaknesses	Obstacles	Opportunities
Dam Failure	<ul style="list-style-type: none"> <li>• State oversight</li> <li>• Multipurpose</li> <li>• Change the purpose</li> <li>• Energy production</li> <li>• Dams are “green”</li> </ul>	<ul style="list-style-type: none"> <li>• Environmental impacts</li> <li>• Age</li> <li>• Costs a lot to repair</li> <li>• Eventually all dams will fail (residual risk)</li> <li>• We don’t have mapping for a lot of spillways</li> </ul>	<ul style="list-style-type: none"> <li>• Environmental detriment</li> <li>• Lack of funding</li> <li>• Perception</li> <li>• Single purpose</li> </ul>	<ul style="list-style-type: none"> <li>• Increased technology</li> <li>• Knowledge</li> <li>• Adaptation</li> <li>• Awareness</li> </ul>
Flood	<ul style="list-style-type: none"> <li>• Experience</li> <li>• New Flood Control District (Structural and nonstructural)</li> <li>• Accommodate flooding</li> <li>• Levees</li> <li>• Dams</li> <li>• Regulation</li> <li>• Natural capital</li> <li>• Multi-purpose</li> <li>• Research/Data</li> <li>• Repetitive losses</li> <li>• Growth</li> </ul>	<ul style="list-style-type: none"> <li>• Levees</li> <li>• Dams</li> <li>• Built environment (damages)</li> <li>• Lack of evacuation planning</li> <li>• Mapping of future conditions (climate change)</li> <li>• Repetitive losses</li> <li>• Growth</li> <li>• Lack of uniformity in regulation</li> <li>• Streams changing channels</li> </ul>	<ul style="list-style-type: none"> <li>• Multipurpose</li> <li>• Endangered Species Act</li> <li>• Vested interests</li> <li>• Political opinions</li> <li>• Funding</li> <li>• Climate change consensus</li> </ul>	<ul style="list-style-type: none"> <li>• Endangered Species Act</li> <li>• Changing attitude</li> <li>• Research/Data</li> <li>• Funding</li> <li>• FCD Opportunity Fund</li> <li>• Public education</li> <li>• Awareness to action</li> </ul>
Earthquake	<ul style="list-style-type: none"> <li>• Seismic Zone (building codes)</li> <li>• Modeling/mapping</li> <li>• Large population</li> <li>• Regional public education</li> <li>• Planning</li> </ul>	<ul style="list-style-type: none"> <li>• Old buildings/infrastructure</li> <li>• Risk unknown for all scenario’s</li> <li>• Large population</li> <li>• Transportation system</li> <li>• Lots of soft soils</li> <li>• Planning</li> </ul>	<ul style="list-style-type: none"> <li>• Landscape</li> <li>• Isolation</li> <li>• “Islands”</li> <li>• Language barrier</li> <li>• Social media reducing neighborhood cohesion</li> <li>• Healthcare facilities</li> <li>• Haven’t had the “big one”</li> <li>• Seattle basin</li> </ul>	<ul style="list-style-type: none"> <li>• Public education</li> <li>• Packaging the message</li> <li>• Planning</li> <li>• Social media</li> </ul>

Hazard	Strengths	Weaknesses	Obstacles	Opportunities
Landslide	<ul style="list-style-type: none"> <li>• Critical areas regulations</li> <li>• Awareness</li> </ul>	<ul style="list-style-type: none"> <li>• High infrastructure exposure</li> <li>• Attitude</li> <li>• High frequency</li> </ul>	<ul style="list-style-type: none"> <li>• Triggering mechanisms</li> <li>• Attractive areas</li> <li>• Engineering</li> <li>• Stressed biology</li> </ul>	<ul style="list-style-type: none"> <li>• Collapsing slopes feed coastal shorelines</li> </ul>
Severe Weather	<ul style="list-style-type: none"> <li>• Quality, early forecasts</li> <li>• Awareness/experience</li> <li>• Landscape (natural capital, trees)</li> </ul>	<ul style="list-style-type: none"> <li>• Hard to map</li> <li>• Extent and location</li> <li>• High exposure</li> <li>• Landscape (trees and utility lines/transportation)</li> </ul>	<ul style="list-style-type: none"> <li>• Climate change</li> <li>• Increase in severe weather</li> <li>• Transportation</li> <li>• Funding</li> <li>• Environmental concerns</li> <li>• Trigger for other hazards</li> </ul>	<ul style="list-style-type: none"> <li>• Knowledge at the individual level – Map Your Neighborhood</li> <li>• Multi-objective projects</li> <li>• Consistent exposure</li> <li>• “Take Winter by Storm”</li> </ul>
Wildfire	<ul style="list-style-type: none"> <li>• DNR Programs</li> <li>• Lots of public lands</li> <li>• High societal value of forests</li> <li>• Efficient response</li> <li>• Firewise</li> <li>• Incident Command System</li> </ul>	<ul style="list-style-type: none"> <li>• Mapping</li> <li>• Fire suppression</li> <li>• Development in interface areas</li> <li>• Firewise</li> <li>• Lack of management of urban forest parks</li> <li>• Lack of experience/awareness</li> </ul>	<ul style="list-style-type: none"> <li>• Climate change</li> <li>• Timber value increasing</li> </ul>	<ul style="list-style-type: none"> <li>• Firewise</li> <li>• Natural fire cycle (fuel mgmt.)</li> </ul>
Tsunami	<ul style="list-style-type: none"> <li>• Evidence</li> <li>• Research</li> <li>• Increased awareness</li> <li>• Lots of high ground</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of experience</li> <li>• Lack of mapping</li> <li>• Warning</li> <li>• Science planning conflicts</li> <li>• No response plan</li> </ul>	<ul style="list-style-type: none"> <li>• Cascading effects</li> <li>• Sea level rise</li> </ul>	<ul style="list-style-type: none"> <li>• Cascadia event – 1-2 hour warning time</li> <li>• Funding for tsunami research</li> </ul>
Volcanic Eruption (Lahar, Tephra)	<ul style="list-style-type: none"> <li>• Mt. St. Helens</li> <li>• Good mapping on lahars</li> <li>• Evacuation plans</li> <li>• Monitoring</li> </ul>	<ul style="list-style-type: none"> <li>• Limited mitigation options</li> <li>• Warning</li> <li>• Lack of perception</li> <li>• Best views</li> </ul>	<ul style="list-style-type: none"> <li>• A lot of mass</li> </ul>	<ul style="list-style-type: none"> <li>• Multi-objective mitigation</li> <li>• Visibility</li> </ul>

**Summary and Closure:**

Meeting adjourned at 2:50 pm.